Amendments to the Drawings:

Attached hereto are two replacement drawing sheets containing clean versions of Figs. 20A and 20B which have been amended to include language identifying the sequence identifiers for the listed sequences to comply with the sequence rules. Particularly the language "Alignment Report: hETBRL2p (SEQ ID NO 18) and hGPR37p (SEQ ID NO 10)" has been added. No new matter has been added.

REMARKS

Claims 37-50 are pending in this application, claims 45-50 have been withdrawn from consideration. Claims 37-44 are pending on their merits.

ELECTION/RESTRICTION

Claims 45-50 have been withdrawn from consideration. Applicants note with appreciation the Examiner's acknowledgement of the election of Group I, claims 37-44 and that SEQ ID NOs. 16, 84, and 85 will be searched. Applicants maintain, at a minimum, Group II claims 45 and 46 drawn to isolated non-endogenous versions of the wild-type GPCRs of SEQ ID NOs. 16 and 85, respectively, should be rejoined with Group I drawn to polynucleotides encoding such non-endogenous versions of the same wild-type GPCRs. Applicants respectfully assert that the search of claim 37-44 necessarily encompasses the search of claims 45 and 46, since the search for claims 37-44 will include a search for SEQ ID NOs. 16 and 85, the elected polynucleotide sequences. Rejoinder of Group II is respectfully requested.

Applicants have amended claims 37-44 and 45-46 to remove the non-elected SEQ ID NOs and to set forth the manner of constitutive activation. No new matter has been introduced by these amendments. Applicants respectfully reserve their right to pursue this subject matter in one or more continuing or divisional applications.

PRIORITY

Applicants have not relied on, nor need they rely on, any priority claim to overcome any rejection of record. Accordingly, Applicants respectfully assert that a discussion of priority is inappropriate at this time. Applicants in no way acquiesce to the assertions made in the Office

Action with regard to priority. The discussion is not germane to any rejection in light of the amendments and further comments made herein. Applicants respectfully request that their continuing data be maintained as originally filed and subsequently updated.

SPECIFICATION

The specification has been amended, in the section entitled Cross Reference to Related Patents, to reflect the current status and relationship of the parent applications.

SEQUENCE RULES

Applicants submit herewith an amendment to Figs. 20A and 20B incorporating the appropriate sequence listing identifiers. Attached hereto are two replacement drawing sheets containing clean versions of Figs. 20A and 20B which have been amended to include language identifying the sequence identifiers for the listed sequences to comply with the sequence rules. Particularly the language "Alignment Report: hETBRL2p (SEQ ID NO 18) and hGPR37p (SEQ ID NO 10)" has been added. No new matter has been added.

CLAIM REJECTIONS – 35 U.S.C. § 112

Claims 37 and 40-41 are rejected under 35 U.S.C. § 112, second paragraph, for allegedly failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Applicants have amended claims 37, 38, 45 and 46, without introducing new matter. The amendment specifies that the non-endogenous, constitutively activated version of the GPCR contains a mutation 16 amino acid residues from the TM6 proline residue. Support for this amendment is found in the specification on page 21, first full paragraph, which indicates the

disclosed GPCRs were modified according to this algorithm. Applicants respectfully submit that this amendment clarifies, as suggested by the Examiner, the method by which the wild-type receptor is mutated and clearly and distinctly points out the Applicants' invention.

Claims 40 and 41 are rejected "because it is not clear what is the difference between an expression vector (claim 41) and a vector (claim 40)". Applicants respectfully submit that the terms are well-known in the art, and although related, are not synonymous. Those of skill in the art will recognize the subtle differences whereby an expression vector is a subset of vectors. Attached hereto are illustrative definitions from www.EverythingBio.com, clearly indicating an expression vector is a type of vector designed to express cloned genes in particular cell types. Those of skill in the art will readily appreciate the difference and the metes and bounds of the claims.

Applicants respectfully assert that all requirements of 35 U.S.C. § 112 have been met. Withdrawal of the rejection is respectfully requested.

CLAIM REJECTIONS – 35 U.S.C. § 103

Claims 37 and 40-44 were rejected under 35 U.S.C. § 103 over a combination of O'Dowd or Polansky '481 further in view of Samama and Pauwels. Although Applicants are entitled to a priority date which precedes at least some of these references, they need not rely on any priority date, since the claims have been amended to point out the location of the mutation which results in a constitutive activation of the GPCR. None of the references teaches or suggests mutating the wild-type GPCR at the 16^{th} amino acid residue from the TM6 proline residue, as claimed. Accordingly, the obviousness rejection should be withdrawn.

CLAIM OBJECTIONS

Claims 38 and 39 are objected to for being dependent upon a rejected claim. Claim 38 has been rewritten in independent form including all limitations of the prior base claim. Accordingly, claim 38 is now in condition for allowance. Claim 39 which depends on claim 38 is likewise in condition for allowance.

The Commissioner is hereby authorized to charge any fee or underpayment thereof or credit any overpayment to deposit account no. 50-1275.

Early reconsideration and allowance of all pending claims is respectfully requested. The examiner is requested to contact the undersigned attorney if an interview, telephonic or personal, would facilitate allowance of the claims.

Respectfully submitted,

COZEN O'CONNOR

Date: December 21, 2005

by: Michael A. Patané
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Definition of vector :

In DNA cloning, the plasmid or phage chromosome used to carry the cloned DNA segment.

This site is dependent on visitors like you. If you think you can add more to this definition or see a correction that needs to be made, click on the EDIT button below and fix it. By working together we can make this site an excellent resource for all!

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Definition of expression vector :

A vector that has been designed to express cloned genes in a particular cell type.

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